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of Engineers®

HEADQUARTERS

ENGINEERING & CONSTRUCTION NEWS

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AUGUST 2000

AUGUST'S THEME:

Engineering & Construction Special Assistants

DWIGHT'S NOTES

The theme for this issue is "Engineering and Construction -- Special Assistants". This is the first of six issues that will address the reorganized Engineering and Construction Division. The purpose of the theme article in these issues will be to acquaint the field for the new structure of the division.

The division is starting to function as a single unit. With the Headquarters move to 441 "G" Street (the General Accounting Office (GAO) Building), we will have 10 individuals with the main headquarters office, while the balance of the division remains in the Pulaski Building, pending completion of our offices in the Kingman Building in Alexandria. This will allow us to work out a number of the problems of having two locations while the offices are located near each other. The construction at the Kingman Building is getting underway with a current completion date of 1 November 2000. The HQ offices at 441 "G" Street are professional quality. The open collaborative working environment may finally induce HQ people to talk to one another.

August and September are doubly busy months. It is the height of the construction season. The fiscal year is ending with the requirement to complete plans and specifications for work that must be awarded before the end of the fiscal year. At the same time, the House and Senate reports on our appropriations bill give us an estimate of the workload for the coming new year, which starts our planning and scheduling activities anew. HQUSACE is getting prepared to welcome a new Chief of Engineers and Deputy Commander for Military Programs. Fact sheets are whirling around all over the place.

When rushing to complete one year and start the next year, be sure and remember our most important resource, our people. Include time in the work plans for training and development of the workforce for the future.

Dwight

(Editors' note: If you want to share your thoughts with our readers regarding Dwight's Notes send an email to the E&C News editor (charles.pearre@usace.army.mil). A synopsis of your comments will be published in the next issue.)

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Engineering & Construction Special Assistants

SPECIAL ASSISTANTS TO THE CHIEF, ENGINEERING AND CONSTRUCTION DIVISION

The combining of Civil Works and Military Programs engineering and construction divisions required some out of the box thinking as to how the new organization will operate. In order to ensure that the Deputy Commanders for Civil Works and Military Programs (DCCW/MP) are being served to the fullest, two new positions were established. Charlie Baldi is the Special Assistant for Civil Works and Ray Navidi is the Special Assistant for Military Programs. Charlie and Ray provide the link between the Chief, Engineering and Construction (E&C) and the DCCW/MP, as well as other HQ elements and MSC's.

The special assistants are the key integrators for matching requirements to E&C competencies and resources in support of the PMBP. In this light the special assistants will be aware of tasks undertaken

at HQ and ensure that E&C staff plays a role. We all know that USACE is an engineering and construction management organization that utilizes the PMBP procedure to produce its products. Through close coordination with other USACE disciplines high quality designs, within schedule and budget will be achieved regularly. The role of the Special Assistants is to ensure engineering and construction is a major entity in all phases of a project, a major task.

Our goal is to stay highly visible in how well engineering and construction works within the PMBP to produce quality projects. We do not want visibility because of missed schedules, over budget or designs unacceptable to the customer. Bottom line - it is extremely important that E&C play in all phases of the PMBP.

Main objectives of the special assistants in FY 01 are:

- To establish communications with the MSC's to exchange of ideas, concerns and improvements to PMBP as related to E&C
- Work with industry organizations to develop strong partnering relationships applicable to the specific organization
- Develop procedure(s) to evaluate the MSC/district adherence to technical policy

In summary these assistants are the E&C "one door" to link the MSC's and HQ for identification and development of technical doctrine, concerns and distribution of successes. They are the focal point for the Deputy Commanders for Civil Works and Military Programs in all related E&C matters.

**POC: CHARLIE BALDI, CECW-E, 202-761-8894
AND RAY NAVIDI, CECW-E, 202-761-0223**

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District of the Month

KANSAS CITY DISTRICT

The work of the Kansas City District, U.S. Army Corps of Engineers, has a major social, environmental, and economic impact on the areas it serves, and is a major contributor to the nation's defense posture.

The district was founded in 1907 primarily to provide for navigation and flood control on the Missouri River. Today it is one of a handful of full-service districts in the Corps, counting among its missions civil works, military design and construction, and environmental clean-up responsibilities. Headquartered in Kansas City, Mo., it has been part of the Northwestern Division since April 1, 1997, formed by reorganization of the Corps of Engineers in January of that year.



Brush Creek is a Kansas City District project located in the heart of Kansas City, MO. Even during construction, it saved more in flood damages prevented than was incurred in the project's total cost to construct.

The district counts among its many accomplishments the construction of 18 lake projects scattered throughout its civil works area of responsibility that includes portions of Kansas, Missouri, Iowa,



Harry S. Truman Dam & Reservoir is one of two District-constructed hydroelectric power projects.

Nebraska, and a piece of far eastern Colorado. The first of these lakes was completed in 1948 and the last was completed in 1988. The lakes provide for navigation and flood control, fish and wildlife mitigation, water supply, hydropower, and recreation. Over the years they have saved billions of dollars in flood damages prevented, and millions of dollars have been spent in the local economies by the recreating public who visit the lakes to fish, boat, camp, hunt, picnic and swim.

The district has been a major force in the nation's defense posture. Among its work were: a total reconstruction of the facilities at Whiteman Air Force Base in Missouri to accommodate the Stealth bomber and major construction at McConnell Air Force Base in Kansas to accommodate the B1-B bomber. Other past work included make Fort Riley, Kansas, ready for the arrival of the Abrams tank, the Bradley Fighting Vehicle, and the Blackhawk helicopter. The district, also, managed construction of the new Engineer School at Fort Leonard Wood, Missouri, and construction of recently completed facilities for the Military Police School and the Chemical School, both recently relocated to Fort Leonard Wood from

Fort McClellan, Alabama under the Base Realignment and Closure Act. At Fort Leavenworth, Kansas, it is overseeing construction of a new United States Disciplinary Barracks that serves as the only maximum-security facility for the Department of Defense. In addition, the district has constructed numerous barracks, training facilities, and other buildings, including a new hospital, at the five military bases, and it provides design work for the U.S. Army Reserve Center Design Program in Kansas and Missouri.

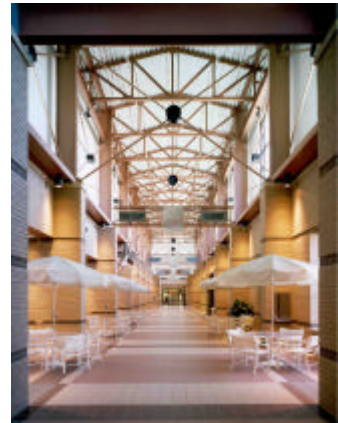
The Kansas City District has been a major player in the cleanup of hazardous, toxic and, most recently, radioactive waste disposal in all areas of the United States since an agreement to assist the Environmental Protection Agency was signed between the Corps and EPA in 1982. It has remediated major sites in half the United States, including the Virgin Islands and Puerto Rico, at Formerly Used Defense Sites (FUDS) and at Superfund sites. The district is also a Center of Expertise for thermal destruction techniques, and manages major contracts for the disposal of radioactive materials throughout the United States. These contracts can and are used by all federal agencies, including DOD and DOE.

The district performs a myriad of other missions, including regulatory (permitting) activities to protect the nation's wetlands and waterways; emergency management activities during major catastrophes such as earthquakes, hurricanes and flooding, and other flood control and public works projects.

Readers may visit the Kansas City District on the Internet at <http://www.nwk.usace.army.mil>.

POC: WILLIAM J. ZANER, CENWK-EC, 816-983-3178

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Emerald City, a morale, welfare and recreation facility by the Kansas City District at McConnell AFB, KS, is the standard for Air Force recreation centers.

Reorganization News

STATUS OF HQUSACE MOVES

Thanks to Karen Durham-Aguilera from Sacramento for keeping me straight and being the first to find the "typo" in last month's article on the reorganization. The move to the Kingman Building has been **DELAYED**, not deleted. The major body of Engineering and Construction is still moving to Alexandria, Virginia, later this year.

The Headquarters move to the General Accounting Office (GAO) Building is currently in progress. Military Programs is in their new quarters and Civil Works is scheduled to move on 19 August. The Special Assistants to the Chief, E&C Division, along with 8 other positions will move to the GAO Building with the other Civil Works Divisions. At that time Dwight Beranek will have two offices. He will divide his time between the GAO Building and the Pulaski Building as long as elements of the division are in the Pulaski Building. Mr. Beranek will have an office in the Kingman Building when the division moves to that building.

In order to provide points of contact for the branches within Engineering and Construction Division, the new Engineering and Construction Chief Telephone and Mailing List will include all the branch chiefs and team leaders within CECW-E when it is distributed around the middle of this month.

POC: CHARLES PEARRE, CECW-EIS, 202-761-4531

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Update

390TH FIGHTER SQUADRON HOSTS DEDICATION



On May 20, 2000 the 390th Fighter Squadron at Mountain Home Air Force Base, Mountain Home, ID, hosted an open house to dedicate their new Squadron Operations Facility.

On May 20, 2000 the 390th Fighter Squadron at Mountain Home Air Force Base, Mountain Home, Idaho, hosted an open house to dedicate their new Squadron Operations Facility. The 390th, dubbed the "Wild Boars", actually moved into their new facility in October 1999. After a long, cold winter spent moving-in and unpacking, the Wild Boars did a barbecue with potluck, inviting all that had worked on creating the new facility to join them. The entire organization was enthusiastic and thankful for their new home. In a fiery dedication speech, COL O'Connell

heralded his people as "heroes" deserving of this new facility.

COL O'Connell proceeded to introduce all of the planners, designers, administrators and builders present. He thanked the base architect for having proposed this project and approving its design. He thanked the Corps twice. First, for having designed the facility while making a difficult schedule. Second, for having managed the construction, again, on schedule and with money left at the end of

construction. And he thanked the contractor, Record Steel of Mountain Home, Idaho, for the fine job they did building the facility. COL O'Connell concluded the entire design and construction team to also be "heroes", worthy to have been the team to have proposed, designed and built this facility.

After the dedication speech, Brad Brandt of the Seattle District presented COL O'Connell with the ceremonial key.

The new facility is a single story office building located on the flight line next to the unit's enlisted barracks and hanger for their F-15 Jet Fighters. The large sun screened patio, behind the facility, opens directly onto the hard stand adjacent to the runway. The exterior of the building is masonry over a steel brace frame, with a standing seam metal roof. The building features an administrative area, a reception area, a duty planning area, maintenance space for the pilots' personal equipment with related storage, an exercise and weight room, a secure mission planning area and a "Squadron Heritage Room" which opens onto the patio mentioned above. Landscaping around the building features native and drought tolerant plantings with large stone mulch.



The large sun screened patio, behind the facility, opens directly onto the hard stand adjacent to the runway. The F-15 pilots have excellent views of their aircraft from this patio and the Squadron Heritage room.

This was a "congressional insert" project. The proposal of design for this facility was developed in 1997 and 1998. Final design was authorized in time for a fourth quarter award in FY98, with construction continuing through FY99. Even with conflicting programming requirements the actual design was accomplished within a very short time frame and met all customer requirements for schedule and budget.

The Corps design team included Jim Nakamoto, project manager and 21 other professionals. Amoreena Roberts, Ezra Abraham, Steve Erland and Flossie McQueen served as the architectural members of the team. Ghassem Khosrownia and Linda Tokunaga provided structural design services for the project. Amy Brandt and Lisa Lejon completed the civil design; Greg Segal, Leon Pope and Ernie Sabo provided the geotechnical work on the project. Pam Yorozu, Terri Taylor and Matt Caesar created facility landscape. Mort Larsen, Jim Kluge and Anita Robinson wrote the specifications and Mel Bonicillo completed the cost estimates. Mark Ortnier provided the mechanical design with the help of Jayanti Sangani, who completed the electrical design and John Zabucovec, who provided general technical support. The architectural firm HNTB of Seattle, Washington did the CID package. The Corps team managing construction was Kent Erickson, Mike Mickelsen and Brad Brandt.

**POC'S: STEVE ERLAND, CENWS-EC-DB-AS, 206-764-3444
AND EZRA ABRAHAM, CENWS-EC-DB-AS, 206-764-3444**

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"REMR PROGRAM OVERVIEW AND GUIDE" NOW AVAILABLE

A summary and guide to the extensive technology developed under the Corps' Repair, Evaluation, Maintenance, and Rehabilitation (REMR) research program is now available on the ERDC web site.

The new *REMR Program Overview and Guide* describes information and technology developed during the REMR program. The guide, which is outline at <http://www.wes.army.mil/REMR/reports.html>, helps users identify specific items of interest within the program's 184 technical reports, 173 technical notes,

51 information bulletins, and nine video reports. Hyperlinks to related documents and web sites are included.

The technology descriptions are categorized first by the seven REMR problem areas, and then by subject areas. For each technology identified, a narrative summary and photographs are provided, along with a listing of related REMR reports, technical notes, and videos.

The REMR Program objective was to identify and develop effective and affordable technology for maintaining and extending the service life of existing Corps civil works structures. Program research covered the broad problem areas of Concrete and Steel Structures, Geotechnical, Hydraulics, Coastal, Electrical and Mechanical, Environmental, and Operations Management. REMR research was accomplished in two phases. Phase I was a six-year, \$35-million effort that was completed in 1989, and Phase II, an eight-year, \$31-million effort brought to conclusion in late 1998.



Initial application of precast concrete system for lock wall rehabilitation, Lock and Dam 22, Mississippi River

Users of technology developed by the REMR Program have reported savings of hundreds of millions of dollars. Savings achieved during the five-year period following completion of Phase I were estimated to exceed \$200 million, and have been projected as similar for Phase II research. Total savings attributed to use of REMR technology are expected to continue to accumulate for many years in the future.

Elements of research begun under REMR are continuing as part of the Corps' High-Performance Materials and Systems Research Program (HPM&S). News from the HPM&S Program is at <http://www.wes.army.mil/SL/HPMS/hpms.htm> on the Internet.

For further information, contact James E. McDonald, via email at mcdonaj@wes.army.mil, or Jessica S. Ruff, via email at ruffj@wes.army.mil, at the U. S. Army Engineer Research and Development Center in Vicksburg, Mississippi.

*POC's: JAMES E. McDONALD, CEERD-SL, 601-634-3230
AND JESSICA S. RUFF, CEERD-IM, 601-634-2587*

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USACE-WIDE REGISTRY OF SKILLS (RoS)

The Registry of Skills (RoS) is an on-line database created to support the Capable Workforce initiative. The database is web-accessible and will contain information on the skills, abilities, education and training of USACE team members. The RoS is intended to be a ready source of information on not only skills and abilities related to team members' current jobs, but also those skills and abilities that might be valuable to the Corps, but not used in current jobs. The RoS can provide benefits by providing commanders with a snapshot of the vast capabilities available throughout the Corps to support the USACE mission. The RoS will also identify gaps in expertise that need to be filled through education, training, mentoring or developmental assignments. Because the RoS is web-based it can quickly identify people with specific skills and abilities in times of need. For example, the RoS database can be searched using a wide variety of search criteria to identify team members with potential to serve on regional design teams, provide independent reviews, serve as expert consultants, serve as troubleshooters, serve on interagency panels or committees, or assist in emergency operations.

While all USACE team members, not just engineers and professionals, are encouraged to register in the RoS – the broader the registration, the more valuable the database – the RoS will contain only information that is entered voluntarily by individual team members. No one will be required to enter information, and only the individual can enter their information.

The RoS will become available on-line on 5 September 2000. To use the RoS to enter your information or to search for people with specific skills and abilities, you must have a CEAP USERID and an Oracle password, be validated as a RoS user, and have access to a computer with a web browser (e.g., Internet Explorer or Netscape Navigator). All team members who already have a CEAP USERID and Oracle password (you have this if you're a user of CEFMS or PROMIS) have already been validated as RoS users. If you're validated, simply go to the USACE Homepage, find the link to the RoS, click on it and log on. If you don't already have a CEAP USERID and Oracle password, call your UPASS administrator (in your Information Management Office) and he/she will set up your USERID and Oracle password and validate you as a RoS user.

The RoS is intended to be very user-friendly. It contains an on-line Help system and a link for sending e-mail to the RoS database administrator. I encourage you to use this to report any problems you have, to comment on the system or to suggest improvements. Your suggestions will be carefully considered, and you will get a reply.

Once on line in September 2000, additional information on registering will be provided to all USACE team members.

POC: RAY NAVIDL, CECW-E, 202-761-0223

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FEDERAL ENGINEER OF THE YEAR AWARD PROGRAM

The U.S. Army Corps of Engineers, together with other federal agencies, is again participating in the annual Federal Engineer of the Year Award (FEYA) Program sponsored by the National Society of Professional Engineers (NSPE). While recognizing the accomplishments of all engineers in the Federal Government, the award focuses on outstanding individual engineers. This is the twenty-second annual FEYA program.

For this competition, each participating agency is responsible for selecting one military officer and/or one civilian engineer who will be designated as that agency's nominees for the FEYA competition. A HQUSACE panel will select the two Corps of Engineers nominees while an NSPE evaluation panel will select the "Federal Engineer of the Year."

Through this program you have the opportunity to formally acknowledge the contributions of an outstanding military and civilian engineer from your command. I urge you to take advantage of this opportunity. In the past, we have had an excellent response to producing exceptional candidates. Your review of applicants should include their involvement in activities both on and off the job.

Your nominees must be registered professional engineers (P.E or E.I.T). An original and eight copies of the NSPE nomination document, must be submitted to HQUSACE (CECW-ETV), by 6 October 2000. To assure equal treatment for all, this deadline date will not be extended. All nomination information including the nomination form can be downloaded from the Engineering and Construction Division homepage (<http://www.usace.army.mil/inet/functions/cw/cecwe/>). Nominations must not be submitted directly to NSPE.

Individual agency award winners and the "Federal Engineer of the Year," will be honored at a ceremony to be held in conjunction with National Engineers Week, 18-24 February 2001. Additionally, the USACE nominees will be formally commended in a HQUSACE honoring.

*POC'S: BRUCE WALLACE, CECW-ETV, 202-761-8890
AND PETE JUHLE, CECW-ETV, 202-761-8512*

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Dam Safety

DAM SAFETY 2000 AND CORPS OF ENGINEERS DAM SAFETY MEETING

Make plans to attend the 17th Annual Conference of the Association of State Dam Safety Officials. Dam Safety 2000, which features a brand new schedule of events, will be held at the Westin Providence and the adjoining Rhode Island Convention Center, 25-30 September 2000.

A technical seminar on Stability Analysis will be presented on Monday and Tuesday (September 25 and 26). A Corps of Engineers Dam Safety Coordinators Meeting will start after the seminar at 1300 hours on Tuesday, September 26, and continued through Wednesday, September 27. The ASDSO conference will open on Thursday, September 28 with General and Technical Sessions. The conference will continue through Saturday, September 30.

District and Division Dam Safety Coordinators as well as MACOM and Installation Dam Safety Engineers are invited and encouraged to attend the Dam Safety Meeting on September 26 and 27. Individuals interested in attending the Corps meeting or having topics to present and discuss at the meeting are asked to contact Charles Pearre, CECW-EIS, or Bob Bank, CECW-EWW, by email.

For more information on the ASDSO Conference call Susan Sorrel at ASDSO (859) 357-5146 for details. Or send an email to sasorrell@damsafety.org. Or visit the ASDSO homepage at <http://www.damsafety.org>. Registration materials are available on the ASDSO homepage and a discount is available to all individuals registering before August 25.

POC: ROBERT BANK, CECW-EWW, 202-761-1660

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FY 2001 INFRASTRUCTURE TECHNOLOGY CONFERENCE

An USACE-wide Infrastructure Technology Conference is being planned for FY 2001. The conference would combine Dam Safety and Structures into a single conference with two or more tracks (or concurrent schedules).

HQUSACE is seeking Districts interested in hosting this conference. Hosting the conference would involve selecting a location within your district, arranging for the lodging and conference site, preparing administrative material, receiving registrations for the conference, and setting and collecting the conference fee. Attendee registration fees will pay the costs of the conference.

If you are interested, you may contact Charles Pearre (202-761-4531), Jerry Foster (202-761-8676), or Joe Hartman (202-761-0291).

POC: CHARLES PEARRE, CECW-EIS, 202-761-4531

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Information

JOB VACANCIES

Two job vacancies are highlighted here for the information of our readers.

The Buffalo District has announced a GS-13 position in the Resident Office at Plum Brook, Ohio. The position is the Resident Office Chief in charge of the Plum Brook Resident Office responsible for management of all field and office engineering activities related to the decommissioning of the Plum Brook nuclear reactor. The work has a great range of diversity and complexity and includes pre-decommissioning activities consisting of site characterization, removal of surplus equipment and material, and asbestos and lead paint abatement. Decommissioning activities include startup, contaminated soil removal, asbestos, lead paint, and equipment removal, removal and disposal of activated material in the Hot Dry Storage Area, reactor internals and tank, piping, concrete, and other building materials. Much of the loose equipment and building materials to be removed and disposed are radioactively contaminated. This position is open to job series Supervisory Civil Engineer (GS-0810), Supervisory Mechanical Engineer (GS-0830), Supervisory Electrical Engineer (GS-0850), Supervisory Nuclear Engineer (GS-0840), and Supervisory Chemist (GS-1320). The announcement is unique in that it includes payment of a relocation bonus of up to \$5,000.00. The announcement is open until 15 September 2000. For more information on this job go to <http://www.cpol.army.mil/> and view announcement number FT00425401.

The Kansas City District has announced a GS-13 structural engineer position in the District Office in Kansas City. The position is responsible for the technical design aspects of highly complex, state-of-the-art features of military projects presenting problems of significant depth and complexity. Position requires extensive professional knowledge in the field of civil engineering including specialized knowledge of the theory of structural dynamics, stresses, strength of materials, and engineering geology to plan, design, and develop criteria and standards pertaining to the construction of a wide variety of military structures. The position also requires knowledge and expertise in building and material design codes and standards. The individual will also serve as HQUSACE Technical Representative for seismic design and provide expert review of new seismic criteria, researches and answers questions of interpretation of seismic criteria. Develops and manages the military Seismic Risk Mitigation Plan for the HQUSACE. The individual is required to meet with HQUSACE experts and other agencies on seismic criteria and design issues. The individual will participate in national seismic criteria development including the developing of design criteria and design procedures for highly specialized, complex structural features. The position reviews directives, site plans, guide specifications, and other available data preparatory to the accomplishment of the structural design and the preparation of design analysis. Duties also include Quality Assurance reviews of design, plans, specifications, and design analyses prepared by others for sufficiency and practicability and compliance with design requirements and established policies. The position also assists the HQUSACE Technical Representative for masonry design, which requires knowledge and expertise in masonry design and construction. This position is open to job series Structural Engineer (GS-0810). The announcement is open until 18 September 2000. For more information on this job go to <http://www.cpol.army.mil/> and view announcement number S00GH049544ASH.

**POC'S: JACK RINTOUL, CELRB-CO, 716-879-4494
AND BILL ZANER, CENWK-EC, 816-983-3178**

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INTERN TRAINING IN KUWAIT

Last year the Transatlantic Programs Center initiated a program, which provides an opportunity for DA Interns in the Corps of Engineers to gain experience at the Kuwait Installation Support Office. To date, three interns from Districts and Divisions outside of TAC have completed rotations in Kuwait. Two others are scheduled for assignment this summer and fall. By all accounts, the program has been a great success. Interns who have gone to Kuwait have been excited about their assignments and they have risen to the challenges of participating in a fast paced operation, which provides much needed support to the Army at a critical location. TAC has been fortunate to benefit from the high quality personnel who have been to Kuwait under this program.

The success of this program is directly proportional to the emphasis placed on it by District and Division Commanders and Career Program Managers. Your support over the past year has been superb. I encourage you to invite your CP-18 Interns to avail themselves of this excellent training opportunity.

Background -- The Installation Support Office (ISO) in Kuwait was formally created in January 1998. It was created to better support the engineering and construction needs of the warfighters stationed in Kuwait defending U.S. vital national interests and the sovereignty of Kuwait and other countries on the Arabian Peninsula against the Iraqi Regime. The warfighters are within the different component commands of the U.S. Central Command (CENTCOM), primarily U.S. Army Central Command (ARCENT) and U.S. Central Air Force (CENTAF).

Work Environment -- An intern assigned to the ISO can expect to be involved in design, contracting, and construction activities. The amount of time spent in any one activity depends on when the intern is in Kuwait in relationship to the life cycle of the projects. The Kuwait ISO operates almost entirely on O&M Appropriations provided by the customers (ARCENT and CENTAF). Project workload is driven by availability of funds. The workload is also driven by the actions of Iraq. Sometimes there are increases to operational tempo (OPTEMPO) which usually effect the operations of the ISO.

The permanent party staff of the TAC ISO in Kuwait numbers eleven. Frequently, personnel are assigned to the ISO on a TDY basis when assistance is needed to handle workload, so there is usually more than eleven at any one time. It is a full service organization providing design, contracting, and construction services. Most of the projects are new construction of operational facilities and life support facilities and have a direct impact on the conditions of the U.S. Forces stationed in Kuwait. Most of the construction is by Task Orders to a Job Order Contract with a local Kuwait firm. The projects are primarily in the \$300,000 to \$500,000 range.

The work environment is fast paced and dynamic. Projects are generated by the customer without notice, sometimes in response to changes in OPTEMPO. The designs are on CADD, usually Microstation. The customer's beneficial occupancy requirements often require an accelerated design. This works well with the JOC concept with the designer participating in task order negotiations and some of the construction activities such as shop drawing reviewing and quality assurance surveillance. Therefore, an intern in the Kuwait ISO can expect to be participate in most of, if not all of the following work activities:

Design Phase:

Project planning and development.
Site surveys.
Engineering analysis.
Design reviews.
Cost estimating.

Contracting Phase:

Preparation of request for proposal (RFP) documents.
Evaluation of proposals.
Contract negotiations.

Construction Phase:

Shop drawing review/approval/filing.
Field quality assurance (QA) site visits and reports.
General surveillance of contractor's activities.
Construction progress meetings (administrative, safety, QA, etc.)
Three phased inspections.
Evaluation of contractor's schedule.
Evaluation and negotiation of change order proposals.

POC: PHIL DENILLO, CETAC-PD-TF, 540-665-3636

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NEW GOVERNMENT ENGINEERING OFFICE ANNOUNCED

The Department of Agriculture (USDA) / Natural Resources Conservation Service (NRCS) is preparing to staff a new Design & Construction Center in Fort Worth, Texas, that will service NRCS engineering work nationwide. There are currently about 20 vacancies for engineers, geologists, and landscape architects being advertised Federal government wide. Most of the positions are at the GS-14 grade level (up to \$93,000 per year).

The vacancy advertisements close 4 September 2000. Details of the positions and application requirements can be viewed at <http://public.nrcs.usda.gov/vacancy/national/fy00/aug07a.htm>.

POC: CHARLES PEARRE, CECW-EIS, 202-761-4531

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Training

STABILITY ANALYSIS

The Association of State Dam Safety Officials will conduct a two-day technical training seminar on "Stability Analysis" on September 25 and 26, 2000, in Providence, Rhode Island. This seminar is being conducted in conjunction with Dam Safety 2000, the ASDSO Annual Conference.

For more information on the seminar go to the ASDSO web site at <http://www.damsafety.org>. Or telephone Susan Sorrell at (859) 257-5146 for additional information.

POC: CHARLES PEARRE, CECW-EIS, 202-761-4531

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Open Discussion and Comments

ABANDONED PIEZOMETER TUBES

Question: Our district has abandoned closed system piezometers at two dams. How do we properly abandon these piezometers to avoid future problems? The district has over 80000 linear feet of 1/4-inch copper tubing in one of the dams. Many of the copper tubes are under 80-psi pressure. Eventually (may be 100 years from now) these copper tubes are going to deteriorate enough so that this pressure will burst them. They should burst just upstream of the gage well where the overburden is the least. While this "might" not fail the dam but it certainly will create some excitement if a lot of water starts flowing from the dam. The district had a well point that was improperly abandoned at another dam in 1946. It could have been properly abandoned at that time by filling it with grout at a cost of less than \$10.00. Instead, when it finally rusted out water started flowing out of the toe of the dam. No one knew a well point was in the area so the decision was made to install two relief wells in the area at a cost of more than \$100,000. Of course this didn't solve the problem. Later three French drains were installed in the area and they became plugged with iron bacteria. While installing another French drain, we found the well point and then properly grouted it. Over \$150000 dollars were spent because \$10 dollars were not spent to do the job right originally. There should be a lesson to be learned here. Back to the piezometers at our two dams. I think we need to fill those copper tubes that go through the core of the dam. That is at least 40000 feet of tubing to be filled and it will take time and money. This is work that can be put off and put off and put off --- for many years (it will never make it above the funding line). If it is put off for many years, every body will forget that it needs to be done and then the problem will show up many years from now. I'm sure there are closed system piezometers in many dams built by the Corps and the Bureau over the last 50 years. The problem has not occurred yet because the life of copper tubing is more than 50 years. I don't know what its life expectancy is but I would guess that it is less than 200 years and the life expectancy of the dams is more than 1000 years. Your thoughts on this???

Response: The individual who submitted the above question made some good points. However, we cannot simply fill abandoned piezometer tubes with grout. To insure that the tube is full, a pressure grout would be required. Using a pressure grout runs the risks of fouling the filter material in the embankment. Therefore, the proper procedure is to simply abandon unused instrument tubes in the dam.

To guard against the problems the writer's district had with the well point, the project manager and the district office must maintain an accurate record of all instrument tubes even installed in the dam. When unusual conditions do occur this record should be the first placed checked to see if an abandoned instrument tube is causing the problem.

Until a method of positively filling a tube without risk of fouling the filter material is developed, the best solution to problems with old instrument tubes is excellent record keeping.

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TECHNICAL REFRESHER COURSE

Question: An issue has been raised regarding whether or not the Corps of Engineers can, out of appropriated funds, pay the costs of Technical Refresher Courses for team members. Please note that

the content of these refresher courses consist of a technical review of subject matter which the employee has already experienced in order to achieve their engineering degree. The course merely serves as a technical "tune-up" providing not only an enhancement to the employee's technical capabilities, but, to the organization as a whole as we stride toward achieving and maintaining technical superiority. In reality, course work of this nature should be defined as continuing education.

Response: In accordance with ER 1110-1-8152, dated 8 Aug 95, entitled "Professional Registration", appropriated funds cannot be used to pay for courses that are solely for the preparation of an individuals to become registered. This was also stated in CECC-J memorandum, dated 13 Mar 98, subject: Fees for Licensing, Certification, Training, and Professional Engineers Stamps.

The regulation and other rulings do not prohibit payment for specific refresher courses that are required in order to meet the mission needs of the district. We recognize that there is a fine line between a course to meet the needs of the Government and an individual refresher course. CECW-E recommends that district develop a continuing education program to benefit all professionals in the organization and the needs of the organization. Such courses will aid employees in keeping current in the professional while not violating ER 1110-1-8152 and its associated rulings.

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ENGINEERING SIGNATURE AUTHORITY

Question: The excerpt below comes from a former COE employee now working for the Forest Service. He raises a concern that I wonder if you may have a response to. I know we allow non-engineers to sign off on stuff checked and signed by engineers that they are over organizationally (as in the case of combined Con-Op or Planning-Engineering Divisions headed by Ops or Planning personnel). But the Forest Service situation sounds a little more sweeping. Appreciate your thoughts/time.

"One of the things which puts a little gloom on the horizon is that the Forest Service has started a trend to use non-engineers (techs or even recreation specialists, etc.) to have engineering design, review, and drawing signature authority. I know that this is contrary to state law, but do you know if Federal law requires engineers to perform engineering? Maybe they don't have to be PE, but I would think one would at least need to be graded as an engineer. Please let me know of any regs or laws."

Response: This has been a continuing question for sometime and has been addressed in past issues of these notes. The last specific discussions being in the April 1999 and August 1999 issues.

There are no known Federal laws that require anything to be approved by a registered professional. However, in AR 690-950, chapter 11, there is a discussion of the need for registration and the mandatory positions for registered engineers. Chapter 11 needs to be updated due to position title changes; however, the intent has not changed.

Plans and Specifications at the District level should be approved and signed by a registered professional. When the organization chief is not a register professional, the non-registered division chief can sign off on memorandums about the plans and specifications; however, that individual should not be signing off on the plans or the specifications themselves.

On the practical side, more and more districts are finding that they must have registered professionals approve plans and specifications; not because of Federal laws, but because of State laws and regulations with which our partners (local sponsors) must comply. This is affecting both our Civil and our Military work, since many of the Military utilities are being contracted out to private operators.

We asked the Forest Service about their policies and received the following reply from their Washington office:

"As budgets and organizations have become smaller in the Forest Service, the engineering staff has often been combined with some other such as land, recreation, fire, etc. Often the "Forest Engineer" position has been combined into some multi-staff director, and is not necessarily filled with an engineer. The engineering organization realizes that it has created problems. We have tried to deal with it by withdrawing signing authorities where the person is not an engineer. Just because an individual supervises an engineer, it does not give them the authority to sign something like the plans for a bridge or dam. For dams our manual is specific in that things must be done by "qualified" engineers. We define qualified as having the same education and experience as would be required to do the same work in State and private practice."

"I think the person who sent the message has confused what someone is doing, with what they should be doing in accordance with our manual. I am attaching a chapter from our manual (FSM 7500) that deals with authorities in the dams program. As you can see it is specific about approval authorities, and defines who is qualified. An plans for an NID size (our class A, B, & C) dam have to be signed by the Regional Director of Engineering."

The quote from the Forest Service message is included to let everyone know that this is not just a Corps problem, but is a government-wide problem. As stated above, only registered professionals should approved official plans and specifications. Non-registered supervisors should not sign the actual plans or specifications sheets.

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(Editors' note: If you want to share your thoughts with our readers regarding a subject of general interest, send an email to the E&C News editor at charles.pearre@usace.army.mil. A synopsis of your comments will be published next time).

Editors' Notes

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